

MR3003-52

Serial Number: 10/617,854

Reply to Office Action dated 5 April 2005

REMARKS/ARGUMENTS

This case has been carefully reviewed and analyzed in view of the Official Action dated 5 April 2005. Responsive to the rejections made in the Official Action, Claims 1, 5-7, and 10-12 have been amended to clarify the combination of elements which form the invention of the subject Patent Application. Additionally, Claims 2-4, 8-9 and 13-17 have been cancelled by this Amendment.

In the Official Action, the Examiner rejected Claims 1-8 and 10-12 under 35 U.S.C. § 102(b), as being anticipated by Islam, et al., U.S. Patent 5,950,230. Claims 9 and 13-17 were rejected under 35 U.S.C. § 103(a), as being obvious over Islam, et al. in view of Talagala, et al., U.S. Patent 6,742,081.

Before discussing the prior art relied upon by the Examiner, it is believed beneficial to first briefly review the structure of the invention of the subject Patent Application, as now claimed. The invention of the subject Patent Application is directed to a disk administering for disks in multiple disk-arrays containing at least one disk array. The system includes a computer having an interface card and a plurality of disk drives connected to the interface card. The plurality of disk drives constitute at least one disk array. Each of the disk drives have an array configuration sector located at a last of a plurality of sectors thereof. The computer access the disk drives through the interface card and manages the disk array by information stored in the array configuration sector. The array configuration sector has a field identifying the disk drive as being part of a

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particular array, a disk array firmware identification field, an array information field, a disk information field, a first serial checksum and a second serial checksum. The first serial checksum is based on a model number, a serial number, and a disk drive firmware revision number encoded in the disk information field. The second serial checksum is based on the fields of the array configuration sector. The computer identifies disk data directly from the first serial checksum.

In contradistinction, the Islam reference is directed to a disk drive managing system for a single drive array. The reference discloses storing configuration data in the last few sectors of the disk. However, as admitted by the Examiner, the reference is silent as to the inclusion of checksum fields. Therefore, nowhere does the reference disclose or suggest the array configuration sector including a first serial checksum and a second serial checksum, wherein the first serial checksum is based on a model number, a serial number and a disk drive firmware revision number encoded in the disk information field, and the second serial checksum being based on the fields of the array configuration sector. Still further, nowhere does the reference disclose or suggest the computer connected to the disk drive array as being able to identify this data directly from the first serial checksum, as now claimed. As described in the Specification, the invention of the subject Patent Application allows the computer to recognize the sequence, the function and the relevant data of disks in a disk array by the serial checksum 509 of each disk, page 4, lines 17-18.

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Thus, as the reference fails to disclose each and every one of the elements of the invention of the subject Patent Application, as now claimed, it cannot anticipate that invention. Further, as the reference fails to suggest such a combination of elements, it cannot make obvious that invention either.

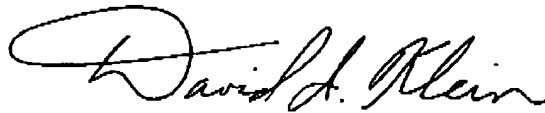
The Talagala, et al. reference does not overcome the deficiencies of Islam, et al. The Talagala, et al. reference is directed to a data storage array employing block checksums and dynamic stripping. The reference discloses a storage system may include a plurality of devices which are addressed through a plurality of map entries to correlate virtual addresses to a physical address on the storage device, with each map entry including a checksum for data stored in the address. However, nowhere does the reference disclose each entry including first and second checksums, wherein the first checksum being based on a model number, a serial number, and a disk drive firmware revision number encoded in the disk information field, and the second serial checksum being based on the fields of the array configuration sector, as now claimed. Further, the reference neither discloses nor suggests the computer identifying disk data directly from the first serial checksum, as claimed.

Therefore, as neither Islam, et al. nor Talagala, et al. disclose or suggest the combination of elements which form the invention of the subject Patent Application, they cannot make that invention obvious.

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For all of the foregoing reasons, it is now believed that the subject Patent Application has been placed in condition for allowance, and such action is respectfully requested.

Respectfully submitted,
For: ROSENBERG, KLEIN & LEE



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Dated: 5 July 2005

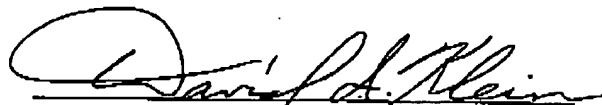
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7/5/2005
Date


David I. Klein